



Mineral Industry Surveys

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COPPER IN MARCH 2004

Mine production for the first quarter of 2004 declined by about 5% from that of the fourth quarter of 2003 and was essentially unchanged from production in the first quarter of 2003, according to data compiled by the U.S. Geological Survey (USGS). Total refined copper production declined by about 4% in the first quarter, and was down by about 12% from that in the first quarter of 2003. Despite a relatively weak first quarter, preliminary estimates compiled by the USGS indicate that mine and refinery production for the full-year 2004 are expected to grow by 80,000 metric tons (t) (7%) and 100,000 t (7.6%), respectively. Most of the growth is anticipated in the second half of the year when expansions by Phelps Dodge Corp. are expected to occur (See Copper in December 2004.).

Consumption of refined copper in the first quarter of 2004 rose by 6% and was up by more than 8% compared with consumption during the first quarter of 2003. Wire-rod mills accounted for most of the increase, with consumption rising by more than 7% compared with that of the previous quarter and more than 10% compared with that of the first quarter of 2003. According to data compiled by the American Bureau of Metal Statistics, Inc. (2004), U.S. shipments of wire rod in March were 24% higher than in March 2003, and first quarter 2004 shipments, which were at the highest level since the first quarter of 2001, were 13% above shipments in the first guarter of 2003. Apparent consumption of wire rod in the United States, which includes net imports, was 15% higher than that for the first quarter of 2003. Inventories of wire rod at producers declined to about 50% of yearend 2002 levels and were at the lowest level since at least 1996, providing further evidence of recovery in demand.

The COMEX price of copper reached a peak of \$1.38 per pound on March 19, and averaged \$1.34 for the month, the highest monthly level since November 1995. Industry reports indicated that owing to tight supplies of refined copper, premiums charged by producers and merchants over the COMEX price had increased significantly. In mid-March, Kennecott Utah Copper Corp. reportedly set its premium at 6 cents per pound while merchants were asking 7 cents per pound

(Bresnick, 2004b§¹). By the end of March, however, the average merchant premium had risen to more than 7 cents per pound, and premiums in the Northeast were being quoted as high as 8.5 cents per pound (Bresnick, 2004a§).

Update

COMEX spot copper prices fluctuated during the first 2 weeks of April before plummeting on a series of industry announcements to \$1.18 by April 28; the price averaged \$1.28 for the month. Prices continued to slide in the first weeks of May, the COMEX price falling to \$1.15 on May 15, but rebounding to \$1.28 at monthend and averaging \$1.21 for the month. Continued tight supplies were reflected in the growing increase in producer and merchant premiums. According to Platts Metals Week, the U.S. producer price averaged \$1.26 per pound in May, 5.1 cents per pound higher than the spot COMEX price. Though the premium was unchanged from that in April, it compared with an average producer premium of 4.2 cents per pound during the first quarter of the year. The Platts Metals Week average New York dealer price premium rose to 8 cents per pound in May, up from 5.5 cents per pound in March and an annual average of 3.2 cents per pound in 2003.

Phelps Dodge Corp. updated the status of its planned expansions. The Bagdad Mine in Arizona was expected to reach full production during the second quarter and the Sierrita Mine was expected to reach capacity in the fourth quarter of the year, while restart of one half of the Chino, NM, mill was pushed forward to the third quarter. In lieu of the previously announced restart of the Cobre mining operation in New Mexico, Phelps Dodge planned to restart the second half of the Chino mill. Phelps Dodge also announced restoration of full capacity at its Miami, AZ, smelter following a maintenance shutdown (Phelps Dodge Corp., 2004§).

The International Copper Study Group (ICSG) developed a consensus view of the world balance for copper production and use at its annual meeting in June. According to the ICSG outlook, world mine and refinery production in 2004 are

¹References that include a section mark (§) are found in the Internet References Cited section.

anticipated to increase by 800,000 t (5.8%) and 556,000 t (3.7%), respectively. Growth in world refined copper use, estimated at 945,000 t (6.1%), is expected to outpace the growth in refined production and result in a net copper production deficit in 2004 of 750,000 t. This compares with a calculated deficit of 360,000 t in 2003 and a surplus of 135,000 t in 2002. Part of the production deficit is expected to be satisfied by the announced release of 200,000 t of copper from inventory withheld from the market by Chile during 2003, and release of undisclosed amounts from stocks accumulated by the Chinese State Reserve Bureau. The growth in refined production in 2005, 938,000 t (6%), is expected to outstrip demand growth, 700,000 t (4.3%), leading to a smaller supply deficit in 2005 (International Copper Study Group, 2004).

References Cited

American Bureau of Metal Statistics, Inc., 2004, US copper wirerod market ABMS report 4: Chatham, NJ, American Bureau of Metal Statistics, Inc., May 27, 8 p.

International Copper Study Group, 2004, Forecast 2004-2005: Lisbon, Portugal, International Copper Study Group press release, May 19, 1 p.

Internet References Cited

Bresnick, Julie, 2004a, Copper premiums climb as supplies dwindle (American Metal Market), accessed April 3, 2004, at URL http://www.amm.com.
Bresnick, Julie, 2004b, Premiums up as tight supplies pinch market (American Metal Market), accessed March 24, 2004, at URL http://www.amm.com.
Phelps Dodge Corp., 2004, Webcast of 1st quarter conference call, accessed April 30, 2004, at URL http://www.phelpsdodge.com

$\label{table 1} {\sf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1

(Metric tons, unless otherwise specified)

				2004	
	Source				January -
	table ²	2003 ^p	February	March	March
Production:					
Primary:	_				
Mine, recoverable	(2)	1,120,000	84,900	92,900	269,000
Refinery:	_				
Electrolytic:					
Domestic and foreign	(4)	662,000 ^r	50,300 ^r	52,300	154,000
Electrowon	(4)	591,000	44,700	48,400	142,000
Total	(4)	1,250,000 ^r	95,000 ^r	101,000	296,000
Secondary recoverable copper:	_				
Refineries	(5)	53,300	3,920	3,900	12,000
Ingot makers ³	(5)	119,000	9,890	9,890	29,700
Brass and wire-rod mills	(5)	676,000	60,500 ^r	64,000	185,000
Foundries, et. ³	(5)	64,600	5,380	5,380	16,100
Smelter, total	(3)	539,000	30,100	41,300	111,000
Consumption:	_				
Apparent	(8)	2,450,000 r	205,000	NA	NA
Refined (reported)	(7)	2,300,000	201,000 ^r	214,000	625,000
Purchased copper-base scrap	(9)	1,150,000	100,000 ^r	107,000	308,000
Stocks at end of period:	_				
Total refined	(11)	656,000 ^r	515,000 °	441,000	XX
Blister, etc.	(11)	56,800	48,100	42,600	XX
Prices:	_				
U.S. producer cathode (cents per pound) ⁴	(12)	85.247	129.302	138.323	127.320
Imports: ⁵	_				
Ores and concentrates ⁶	(14)	27,100	1,620	NA	NA
Refined	(14)	882,000	48,800	NA	NA
Exports: ⁵					
Ores and concentrates ⁶	(15)	9,860	2,710	NA	NA
Refined	(15)	93,300	18,500	NA	NA

^pPreliminary. ^rRevised. NA Not available. XX Not applicable.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

²Numbers in parentheses refer to the significant tables where these data are located.

 $^{^3 \!} Monthly$ data and 2003 cumulative data estimated based on 2002 monthly average.

⁴Source: Platts Metals Week.

⁵Source: U.S. Census Bureau.

⁶Copper content.

$\label{eq:table 2} \textbf{MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES}^1$

(Metric tons)

	Red	coverable copp	er	(Contained copper	
Period	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2003: ^p						
January - March	182,000 ^r	88,600 ^r	271,000 ^r	148,000 ^r	126,000	274,000 ^r
March	64,100	33,300	97,300	52,000	46,600	98,500
April	59,800	27,600	87,400	47,400	41,100	88,500
May	62,400	31,300	93,700	50,400	44,400	94,800
June	65,100	29,400	94,600	49,600	46,400	96,000
July	63,900	34,200	98,100	49,500	50,100	99,600
August	63,400	31,400	94,700	50,500	45,400	95,900
September	59,700	34,100	93,900	50,600	44,400	94,900
October	62,300	33,200	95,500	49,600	47,000	96,600
November	60,200	31,800	92,000	46,200	47,000	93,200
December	62,000	33,400	95,300	49,600	46,900	96,500
Year	741,000	375,000	1,120,000	591,000	539,000	1,130,000
2004:						
January	58,500	32,400	90,900	48,700	43,200	91,900
February	55,200	29,700	84,900	44,700	41,200	85,900
March	61,400	31,500	92,900	48,400	45,700	94,100
January - March	175,000	93,600	269,000	142,000	130,000	272,000

^pPreliminary. ^rRevised.

 $\label{eq:table 3} \text{COPPER PRODUCED AT SMELTERS IN}$ THE UNITED STATES, BY SOURCE 1,2

(Metric tons, copper content)

	Anode
Period	production
2003: ^p	
January - March	132,000
March	35,700
April	29,700
May	46,000
June	49,700
July	46,600
August	49,200
September	46,000
October	44,100
November	47,800
December	47,400
January - December	539,000
2004:	
January	39,700
February	30,100
March	41,300
January - March	111,000

Preliminary.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

³Includes copper content of precipitates and other metal concentrates.

¹Includes blister, anode and copper from primary or secondary sources.

²Data are rounded to no more than three significant digits; may not add to total shown.

 ${\bf TABLE~4}$ PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1

(Metric tons)

	Prir	nary materials			
	Electrolytically				Total
Period	refined ²	Electrowon	Total	Scrap	refined
2003: ^p					
January - March	190,000 ^r	148,000 ^r	337,000	14,100	352,000
March	60,300 ^r	52,000	112,000 ^r	5,670	118,000
April	45,200 ^r	47,400	92,600 ^r	6,140	98,700
May	44,400 ^r	50,400	94,700 ^r	4,050	98,800
June	52,200 ^r	49,600	102,000 ^r	4,130	106,000
July	56,700 ^r	49,500	106,000 r	4,130	110,000
August	55,100 ^r	50,500	106,000	3,910	110,000
September	57,100 ^r	50,600	108,000	4,220	112,000
October	53,600 ^r	49,600	103,000 r	4,490	108,000
November	50,500 ^r	46,200	96,700 ^r	4,050	101,000
December	57,700 ^r	49,600	107,000 ^r	4,080	111,000
Year	662,000 ^r	591,000	1,250,000 ^r	53,300	1,310,000
2004:	-				
January	51,300 ^r	48,700	100,000 r	4,190	104,000
February	50,300 ^r	44,700	95,000 ^r	3,920	99,000
March	52,300	48,400	101,000	3,900	105,000
January - March	154,000	142,000	296,000	12,000	308,000

^pPreliminary. ^rRevised.

 ${\it TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP $^{\rm I}$

(Metric tons, copper content)

	Refin	eries ²	Ingot m	akers ³	Brass and wi	re-rod mills	Foundrie	es, etc. ³	
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total ⁴
2003: ^p									
January - March	3,960	10,100	7,030 ^r	22,600 r	169,000 ^r	7,120 ^r	6,070 ^r	10,100 ^r	236,000
March	1,340	4,340	2,340	7,550	54,200	1,920	2,020	3,360	77,100
April	1,340	4,810	2,340	7,550	51,600	2,920	2,020	3,360	75,900
May	1,340	2,710	2,340	7,550	52,400	2,910	2,020	3,360	74,700
June	1,340	2,790	2,340	7,550	54,300	2,910	2,020	3,360	76,600
July	1,340	2,800	2,340	7,550	50,600	2,750	2,020	3,360	72,700
August	1,340	2,580	2,340	7,550	52,900	2,190	2,020	3,360	74,300
September	1,340	2,880	2,340	7,550	53,900	2,790	2,020	3,360	76,200
October	1,340	3,160	2,340	7,550	56,300	2,880	2,020	3,360	78,900
November	1,340	2,720	2,340	7,550	51,100 ^r	2,450	2,020	3,360	72,900 ^r
December	1,340	2,740	2,340	7,550	51,900 ^r	2,880	2,020	3,360	74,100 ^r
Year	16,000	37,300	28,100	90,600	644,000	31,800	24,300	40,300	912,000 r
2004:									
January	1,340	2,860	2,340	7,550	57,400 ^r	3,610	2,020	3,360	80,500 ^r
February	1,340	2,590	2,340	7,550	56,600 ^r	3,900	2,020	3,360	79,700 ^r
March	1,340	2,570	2,340	7,550	60,300	3,650	2,020	3,360	83,100
January - March	4,010	8,010	7,030	22,600	174,000	11,200	6,070	10,100	243,000

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²From domestic and foreign source materials.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Electrolytically refined and fire-refined scrap based on source of material at smelter level.

³Monthly data and 2003 cumulative data estimated based on 2002 annual data.

⁴Does not include an estimate, based on reported 2002 data, of 3,100 tons per month from new scrap and 2,020 tons per month from old scrap of copper recovered from scrap other than copper-base.

 ${\bf TABLE~6}$ PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES 1

(Metric tons, gross weight)

	Prod	uction	Ship	ments	Stocks, er	nd of period
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2003: ^p						
January - March ^r	344,000	412,000	344,000	413,000	XX	XX
March	115,000	140,000	114,000	135,000	59,700	34,900
April	115,000	133,000	115,000	130,000	59,500	37,700
May	111,000	128,000	112,000	132,000	58,200	33,400
June	114,000	126,000	114,000	125,000	57,700	34,800
July	107,000	123,000	110,000	126,000	54,800	31,400
August	111,000	140,000	112,000	142,000	53,500	29,900
September	117,000	142,000	118,000	147,000	53,200	24,900
October	120,000	156,000	119,000	159,000	54,000	21,600
November	110,000 ^r	139,000	111,000 ^r	136,000	53,500 ^r	24,700
December	106,000	131,000	106,000	134,000	53,800 ^r	22,200
Year	1,360,000	1,630,000	1,360,000	1,640,000	XX	XX
2004:						
January	115,000	158,000	116,000	151,000	52,400 ^r	29,400
February	117,000 ^r	146,000 ^r	120,000	147,000 ^r	52,200 ^r	28,500 ^r
March	124,000	156,000	125,000	165,000	51,300	19,700
January - March	355,000	461,000	360,000	463,000	XX	XX

^pPreliminary. ^rRevised. XX Not applicable.

 $\label{eq:table 7} \textbf{TABLE 7} \\ \textbf{CONSUMPTION OF REFINED COPPER}^1$

(Metric tons)

	Wire-rod	Brass	Other	
Period and item	mills	mills	plants ²	Total
2003: ^p			•	
January - March	414,000	147,000 ^r	16,900 ^r	577,000 ^r
March	142,000	50,000	5,630	198,000
April	133,000	49,500	5,630	188,000
May	131,000	49,900	5,630	187,000
June	130,000	50,400	5,630	186,000
July	122,000	49,500	5,630	177,000
August	143,000	46,800	5,630	195,000
September	143,000	48,000	5,630	197,000
October	157,000	49,500	5,630	212,000
November	140,000	49,600	5,630	195,000
December	128,000	46,900 ^r	5,630	181,000
Year	1,640,000	587,000	67,600	2,300,000
2004:	•			
January	156,000	47,900	5,630	210,000
February	146,000 r	49,600 r	5,630	201,000 ^r
March:	-			
Cathodes	154,000	34,500	818	190,000
Wire bars			(3)	(3)
Ingots and ingot bars		1,150	2,230	3,390
Cakes and slabs		(3)	(3)	(3)
Billets and other	W	18,600	2,580	21,200
Total	154,000	54,300	5,630	214,000
January - March	457,000	152,000	16,900	625,000

 $^{^{}p}$ Preliminary. r Revised. W Withheld to avoid disclosing company proprietary data included with "Cathodes." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

¹Data are rounded to no more than three significant digits; may not added to totals shown.

²Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2002 annual data.

³Withheld to avoid disclosing company proprietary data; included with "Billets and others."

 $\label{eq:table 8} \textbf{U.S.} \ \textbf{APPARENT CONSUMPTION OF COPPER}^1$

(Metric tons)

	Refined copper	Copper in	Refined general	Refined	Stock change	Apparent
Period	production	old scrap ²	imports ³	exports ³	during period	consumption
2003: ^p						
January - February	225,000 ^r	36,900 ^r	126,000	3,310	(92,000) ^r	477,000 ^r
March	112,000 ^r	19,200	52,500	1,510	2,940	179,000 ^r
April	92,600 ^r	20,700 ^r	52,200	606	(4,410)	169,000 ^r
May	94,700 ^r	18,600 ^r	56,000	15,900	(73,100)	226,000 r
June	102,000 ^r	18,600	51,500	23,000	(59,200)	208,000 ^r
July	106,000 ^r	18,500	40,700	5,080	(36,300)	197,000 ^r
August	106,000	17,700	72,700	4,080	5,710	186,000 ^r
September	108,000	18,600	46,000	4,330	(30,600)	198,000 ^r
October	103,000 ^r	19,000	69,100	4,640	(58,300)	245,000 ^r
November	96,700 ^r	18,100	63,300	8,470	(24,400) r	194,000 ^r
December	107,000 ^r	18,600 ^r	57,200	22,300	(11,000)	172,000 ^r
Year	1,250,000 ^r	224,000	687,000	93,300	(381,000) ^r	2,450,000 ^r
2004:						
January	100,000 ^r	19,400	43,700	11,000	(77,100) ^r	229,000 ^r
February	95,000 ^r	19,400	45,400	18,500	(63,600) r	205,000
March	101,000	19,200	NA	NA	(74,000)	NA
January - February	195,000	38,800	89,100	29,500	(141,000)	434,000

^pPreliminary. ^rRevised. NA Not available.

 ${\bf TABLE~9}$ CONSUMPTION OF PURCHASED COPPER-BASE SCRAP $^{\rm I}$

(Metric tons, gross weight)

	Sme	lters			Brass	and			
	and ref	ineries	Ingot m	akers ²	wire-rod	mills ³	Foundrie	s, etc. ²	Total scrap
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2003: ^p									
January - March	4,000	9,850	10,500 ^r	32,000 r	214,000 ^r	7,310 ^r	10,600 ^r	11,200 ^r	300,000
March	1,350	4,000	3,490	10,700	68,800	1,980	3,530	3,730	97,500
April	1,350	5,440	3,490	10,700	64,400	2,970	3,530	3,730	95,500
May	1,350	2,750	3,490	10,700	65,700	2,960	3,530	3,730	94,200
June	1,380	2,790	3,490	10,700	67,900	2,970	3,530	3,730	96,400
July	1,390	2,780	3,490	10,700	62,800	2,790	3,530	3,730	91,200
August	1,350	2,600	3,490	10,700	65,900	2,230	3,530	3,730	93,600
September	1,350	2,900	3,490	10,700	67,500	2,850	3,530	3,730	96,000
October	1,350	3,180	3,490	10,700	70,800	2,990	3,530	3,730	99,800
November	1,350	2,560	3,490	10,700	64,000 ^r	2,550	3,530	3,730	91,900 ^r
December	1,350	2,760	3,490	10,700	65,200 ^r	2,980	3,530	3,730	93,700 ^r
Year	16,200	37,600	41,900	128,000	808,000 ^r	32,600	42,300	44,800	1,150,000
2004:									
January	1,350	2,880	3,490	10,700	71,900 ^r	3,730	3,530	3,730	101,000
February	1,350	2,610	3,490	10,700	70,800 ^r	4,020	3,530	3,730	100,000 ^r
March	1,350	4,000	3,490	10,700	76,100	3,760	3,530	3,730	107,000
January - March	4,050	9,480	10,500	32,000	219,000	11,500	10,600	11,200	308,000

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2002 data.

³Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Monthly data and 2003 cumulative data estimated from 2002 annual data.

³Consumption at brass and wire-rod mills assumed equal to receipts.

$\label{eq:table 10} \text{CONSUMPTION OF PURCHASED COPPER-BASE SCRAP}^{1,\,2}$

(Metric tons, gross weight)

	2003 ^p				2004	
Scrap type and processor	January - March	Year	January	February	March	January - March
No. 1 wire and heavy:			-	-		-
Smelters and refiners	17,400 ^r	70,100	5,850	5,850	5,850	17,600
Brass and wire-rod mills	94,400 ^r	377,000	34,800 ^r	35,000 ^r	35,100	105,000
No. 2 mixed heavy and light:						
Smelters and refiners	8,190 ^r	30,800	2,310	2,030	2,010	6,340
Brass and wire-rod mills	1,540 ^r	5,750	697	710	865	2,270
Total unalloyed scrap:						
Smelters and refiners	25,600 ^r	101,000	8,160	7,880	7,860	23,900
Brass and wire-rod mills	95,900 ^r	383,000	35,500 ^r	35,700 ^r	36,000	107,000
Red brass: ³						
All plants	12,300 ^r	48,900	4,300	4,310	4,350	13,000
Leaded yellow brass:						
All plants	84,500 ^r	310,000	27,100	26,700	29,800	83,600
Yellow and low brass:						
All plants	15,900 ^r	49,800	3,360	3,370	3,370	10,100
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	20,400 r	78,700	7,210	6,990	7,800	22,000
Auto radiators:						
Smelters and refiners	9,980 ^r	39,900	3,330	3,330	3,330	9,980
Bronzes:						
Smelters and refiners	2,520 ^r	10,100	840	840	840	2,520
Brass mills	1,480	5,390	533	436	596	1,570
Nickel-copper alloys:						
All plants	3,540 ^r	16,700	1,600	1,630	2,100	5,330
Low grade and residues:						
Smelters and refiners	3,350 ^r	13,400	1,120	1,120	1,120	3,350
Other alloy scrap: ⁴						
Smelters and refiners ⁵	942 ^r	3,760	314	314	314	942
Brass mills	1,210 ^r	4,110	697	332	513	1,540
Total alloyed scrap:						
Smelters and refiners	30,700 ^r	123,000	10,200	10,200	10,200	30,700
Brass mills	125,000 ^r	458,000	40,100	39,200	43,900	123,000
Total scrap:						
Smelters and refiners	56,400 ^r	224,000	18,400	18,100	18,100	54,600
Brass and wire-rod mills	221,000	841,000	75,600 ^r	74,800 ^r	79,800	230,000

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap: Smelters and refiners." ¹Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 7,240 tons of scrap per month based on 2002 annual data; monthly data include estimates of about 14,200 tons of scrap per month consumed by ingot makers.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

⁴Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

⁵Includes items indicated by symbol W.

$\label{eq:table 11} \text{COPPER STOCKS AT END OF PERIOD}^1$

(Metric tons)

		-	-	Re	fined copper	_		
	Crude		Wire-rod					Total
Period	copper ²	Refineries ³	$mills^3$	Brass mills ³	Other ⁴	Comex ⁵	LME^6	refined
2003: ^p								
March	47,100	5,270	39,900	23,100	3,600	330,000	545,000	947,000
April	41,900	3,770	42,800	17,900	3,600	351,000	524,000	943,000
May	46,900	7,160	42,500	16,100	3,600	305,000	495,000	869,000
June	45,800	4,750	36,200	21,500	3,600	291,000	453,000	810,000
July	42,300	4,820	28,400	23,700	3,600	282,000	431,000	774,000
August	47,900	5,310	30,100	20,400	3,600	276,000	444,000	780,000
September	44,500	4,100	33,300	17,600	3,600	271,000	419,000	749,000
October	51,700	3,590	23,200	14,700	3,600	267,000	379,000	691,000
November	57,500	6,960	20,900	19,500 ^r	3,600	262,000	353,000	667,000
December	56,800	12,100	29,700	20,200 ^r	3,600	255,000	335,000	656,000
2004:								
January	49,900	9,840	22,500	12,500 ^r	3,600	239,000	291,000	578,000
February	48,100	10,100	25,200 ^r	16,300 ^r	3,600	219,000	240,000	515,000
March	42,600	10,800	31,900	14,200	3,600	213,000	167,000	441,000

^pPreliminary. ^rRevised.

TABLE 12 AVERAGE PRICE OF COPPER IN THE UNITED STATES AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

	U.S. producers	Comex	LME
	delivered price	first	cash price
Period	cathode1	position ²	Grade A
2003:			_
March	79.875	75.717	75.234
April	76.365	72.176	71.988
May	78.020	75.045	74.746
June	79.716	76.926	76.484
July	82.245	78.055	77.549
August	84.165	79.995	79.826
September	86.030	81.840	81.152
October	92.290	88.104	87.099
November	96.867	92.681	93.215
December	103.917	99.731	99.831
Year	85.247	81.050	80.684
2004:			_
January	114.336	110.150	109.911
February	129.302	125.116	125.144
March	138.323	134.137	136.439
January - March	127.320	123.134	123.831
1	·		

¹Listed as "U.S. producer cathode."

Sources: Platts Metals Week and American Metal Market.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Copper content of blister and other materials in transit and in process of refining.

³Stocks of refined copper as reported; no estimates are made for nonrespondents.

⁴Monthly estimates based on reported and 2002 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

⁵Commodity Exchange Inc., New York.

 $^{^6}$ London Metal Exchange Ltd., U.S. warehouses.

²Listed as "Comex high grade first position."

 ${\it TABLE~13}$ NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers (N	New York)
		•		Red brass
	Brass mills	Refiners	No. 2	turnings and
Month	No. 1 scrap	No. 2 scrap	Scrap	borings
2003:				
March	74.69	64.26	52.00	38.00
April	70.82	61.80	49.41	38.00
May	73.95	64.53	49.00	38.00
June	76.29	67.36	49.00	38.00
July	73.86	65.00	46.77	36.27
August	79.48	69.43	49.00	38.00
September	81.96	72.75	54.43	38.00
October	87.09	77.89	55.18	38.00
November	92.22	82.81	59.44	38.44
December	98.76	89.69	67.00	46.00
Year	80.42	70.86	53.02	38.61
2004:				
January	108.80	98.38	72.60	50.20
February	124.08	112.66	75.84	52.37
March	138.93	123.95	95.14	63.05
January - March	123.94	111.66	81.19	55.21

Source: American Metal Market.

 ${\it TABLE~14} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~COPPER~(UNMANUFACTURED),~BY~CLASS}$

(Metric tons, copper content)

	Ore and concentrate			Matte,	Matte, ash and precipitates			ster and anode	es	Refined			
		20	004		2004 			20	04		2004		
Country or			January -						January -			January -	
territory	2003	February	February	2003	February	February	2003	February	February	2003	February	February	
Belgium				46						15			
Brazil							(2) r			11,800			
Canada	86			187	25	27	83,600	6,680	13,500	218,000	28,500	54,000	
Chile	4,940						45,200	2,920	5,830	348,000	8,140	19,800	
Germany				59						8,530	1,800	1,980	
Mexico	22,000	1,620	8,610	501	1	35	10,200	126	1,070	21,600			
Namibia							17,700						
Peru							5 ^r			258,000	10,000	27,700	
Taiwan				699	59	177							
United Kingdom							2	(2)	(2)	10,100	10	10	
Other				8		25	23 ^r	19	20	6,220	335	687	
Total	27,100	1,620	8,610	1,500	85	264	157,000	9,740	20,400	882,000	48,800	104,000	

^rRevised. -- Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

 $\label{eq:table 15} \text{U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS}^{\text{l}}$

(Metric tons, copper content)

	Ore and concentrate			Matte, ash and precipitates			Blis	ter and anode	es	Refined		
		2004			2004			2004		-	2004	
Country or			January -			January -			January -			January -
territory	2003	February	February	2003	February	February	2003	February	February	2003	February	February
Canada	7,540	2,550	4,360	6,740	1,660	3,090	17,200	3,390	5,190	2,100	191	212
China	1,380	63	87	153	1	1	567	10	42	71,600	4,960	11,400
Costa Rica				3			1			254	8	591
Domican Republic	1					83						
Germany		25	25	(2)			441 ^r	40	100	185		14
Hong Kong	27	29	29	74		1	2,650	277	594	52		2
India				175		20	118	52	52	1,370	167	474
Italy				5			219	15	15	81	502	502
Japan	107	6	13	40	16	16	85			251		27
Korea, Republic of		23	23	12			788	85	192	742	1,040	1,980
Mexico	224	6	12	8,090	526	767	252	3	17	12,200	6	21
Netherlands				1	36	36				11		
Peru	214			20								
Saudi Arabia										28	2,370	2,370
Singapore	6			4		1	478	79	167	71	6	8
Spain	46			36			422	38	78	5		
Taiwan	11						1,270	120	299	3,630	8,880	11,400
United Arab Emirates	4		5	4			503		6	4		
United Kingdom	41		9	77	7	23	430	45	51	42	14	23
Venezuela							12			12	300	300
Other	264 ^r		2	201 ^r	26	24	683 ^r	38	123	723 ^r	77	158
Total	9,860	2,710	4,560	15,600	2,270	4,060	26,100	4,200	6,930	93,300	18,500	29,500

^rRevised. -- Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

TABLE 16 $\mbox{U.S. COPPER SCRAP TRADE}^1$

(Metric tons, gross weight)

	Imports							Exports						
	Unalloyed			Alloyed				Unalloyed		Alloyed				
	2004			2004				2004			2004			
Country or			January -			January -			January -			January -		
territory	2003	February	February	2003	February	February	2003	February	February	2003	February	February		
Barbados	229	23	35	8										
Belgium				46			2,630	185	761	6,010	486	738		
Canada	4,130	390	641	37,300	3,640	7,000	21,200	1,490	3,090	17,500	1,080	1,930		
China				824	47	173	225,000	14,700	29,800	245,000	21,900	39,500		
Costa Rica	921	64	165	404	10	41				6				
Dominican Republic	1,100	89	193	766	50	127				4				
El Salvador	62	67	109	468	26	38								
Germany	19			5,250 ^r	288	397	7,900	332	831	7,680	998	1,530		
Guatemala	474	39	74	869	33	59								
Honduras	534	58	109	488	58	89								
Hong Kong							2,530	246	356	9,600	1,630	2,410		
India				18			5,550	505	875	45,400	2,610	4,530		
Jamaica	640	32	91	140		24								
Japan	77	7	15	261	1	1	6,790	407	883	9,110	429	885		
Korea, Republic of				21			25,400	2,600	5,250	15,500	1,500	2,660		
Malaysia				272	15	38	3,620			88		28		
Mexico	9,950	658	1,490	18,700	1,710	3,220	3,200	358	730	808	175	252		
Nicaragua	238	28	43	207	32	46				20				
Taiwan				462	46	261	8,500	1,120	1,990	6,860	1,220	1,990		
United Kingdom	278	40	40	781	56	59	97			857	100	201		
Venezuela	159	27	69	957	12	41		72	72					
Other	793	29	61	2,750 ^r	217	433	2,940	66	145	9,050	556	1,480		
Total	19,600	1,550	3,130	71,000	6,240	12,000	316,000	22,100	44,700	373,000	32,700	58,100		

^rRevised. -- Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.